

ABSTRACT

A wireless communication apparatus is capable of increasing data capacity that can be transmitted and reducing power consumption by reducing the amount of control signal to be transmitted, and capable of increasing system capacity by reducing interference with respect to other wireless communication apparatuses.

In this apparatus, control information extraction section (105) extracts information indicating the number of CQI's contained in control information.

Reception quality measuring sections (113-1 to 113-n) measure reception quality of each sub-carrier within a communication band.

CQI generating section (114) generates CQI's for some of the sub-carriers of superior reception quality within the communication band.

Multiplexer (122) multiplexes CQI's, sub-carrier number information generating the CQI's, and ACK signals or NACK signals.

The SC selecting section (127) then selects the number of sub-carriers from a base station apparatus of superior reception quality allocated using the CQI quantity designation information.